198.

UNIVERSITY OF CALIFORNIA
MUSEUM OF VERTEBRATE ZOOLOGY

North, C.P.
San Bernardino and Imperial Cos., Calif.
Dec. 1938 - Jan. 1939

North, C.P.

California ; San Bernardino and Imperial Co.

Dec. 17, 1938 - Jan. 20, 1939

Catalog Nos. 210-262 pp. 1-23

(acc. 5760, mammals 84722-807) (+ species accts.)

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North (Copy) cpn

8 mi. S of Palo Verde, Imperial Co., Calif.

Dec. 18, 1938

210 Crotaphytus
211 ———
212 Uta
213 Uta

Dec. 19, 1938

Arroyo Seco, 12 mi S of Palo Verde, Imperial Co., Calif.

214♀ Dipodomys
215♂ Peromyscus maniculatus
216♂ Dipodomys

Dec. 21, 1938

217♀ Perognathus
218♀ Dipodomys
219♂ Mimus polyglottos leucopterus
220♀ Perognathus

Dec. 22, 1938

221♀ Perognathus
222♀ Phainopepla nitens
223♀ Dipodomys
224 Uta
225 Uta
226 Uta
227 Uta

Dec. 23, 1938

18 mi. N of Oglby, Imperial Co., California.

228♀ Perognathus 190-110-23-6

Dec. 24, 1938

18 mi. E of Calexico, Imperial Co., Calif.

229♂ Mus musculus ~~227~~ 145-72-17-11

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Dec. 25, 1938

16 mi. E of Calexico, Imperial Co., Calif.

230 ♂	Dipodomys	227-134-36-11
231 ♂	Thomomys	244-86-33-4
232 ♂	Dipodomys	245-147-36-12
233 ♀	Dipodomys	236-141-37-12
234 ♂	Dipodomys	261-160-38-12

~~235~~ Dec. 27, 1938

14 mi. E of Calexico, Imperial Co., Calif.

235 ♂	Neotoma	361-178-37-30
Skin only 236 ♀	Neotoma	366-183-36-25

Dec. 29, 1938

14 mi. W of Calexico, Imperial Co., Calif.

237 ♂	Thomomys	261-101-33-6
238 ♂	Toxostoma lecontei - 14 mi E of Calexico.	

6 mi. S, 3½ mi. E of Mt. Springs, Imperial Co., Calif.

239 ♀	Perognathus	176-99-24-8
240 ♂	Perognathus	191-111-23-9
241 ♀	Dipodomys	230-141-36-11
242 ♀	Dipodomys	231-143-36-11

Dec. 30, 1938

Skull only 243 ♂	Peromyscus	167-97-19-16
Skull only 244 ♀	Peromyscus	165-97-19-17
245 ♀	Thomomys	210-76-31-4
246 ♀	Thomomys	199-72-30-3
Skel. Skel. 247 ♀	Dipodomys	239-148-36-11
Skel. Skell. 248 ♂	Dipodomys	258-161-38-13

Jan. 1, 1939

4 mi. N of Warrens Well, San Bernardino Co., Calif.

249 ♀	Thomomys	194-68-26-3

North (copy) CPN

4 mi. N of Warrens Well, San Bernardino Co., Calif

Jan. 1, 1939

250 ♂ Thomomys 181-58-26-3
251 ♂ Neotoma 282-134-31-25
252 ♂ Neotoma 272-123-31-26

Jan. 3, 1939

8 mi. SSE of Hesperia, San Bernardino Co., Calif.

253 ♂ Dipodomys 299-181-44-13
254 ♂ Dipodomys 297-180-43-12
255 ♂ Anthus rubescens

Jan. 4, 1939

256 ♀ Thomomys 210-77-29-4
skull only skull only 257 ♂ Onochomys 126-42-19-13
retained by CPN { 258 ♀ Dipodomys mohavensis 275-170-41-13
259 ♂ Dipodomys mohavensis 307-191-46-16
260 ♀ Dipodomys mohavensis 283-170-43-13

Jan. 5, 1939

4 mi. N of Lake Arrowhead, San Bernardino Co., Calif

261 ♀ Xenopicus albolarvatus

Jan. 1, 1939

~~262~~ ~~Uta~~ 4 mi. N of Warrens Well, San Bernardino Co., Calif.
262 Uta

North, C.P.
1938-1939

San Bernardino and Imperial Cos., Calif.
Dec. 18, 1938 – Jan. 20, 1939

General Account

(Copy) cpa

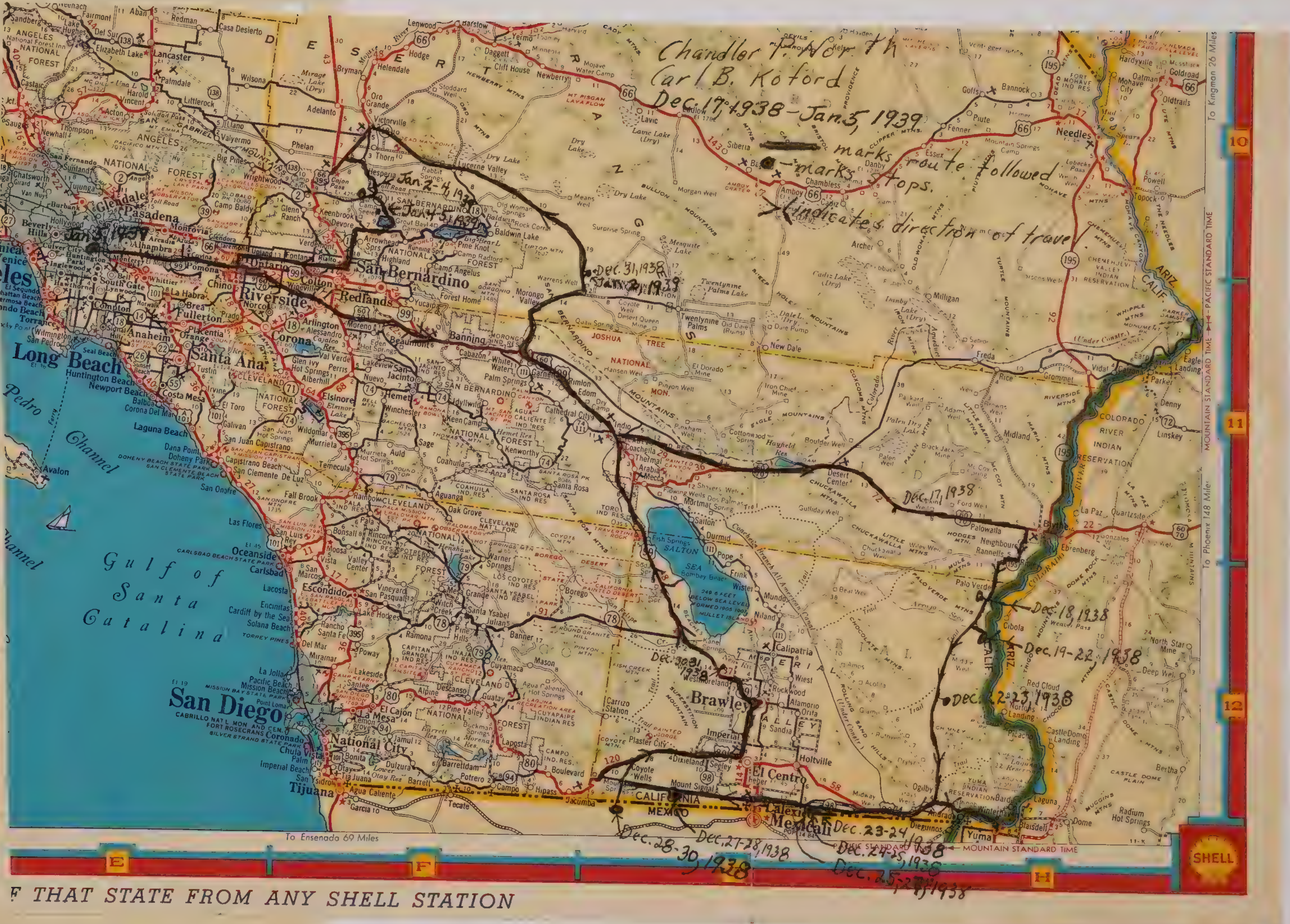
General Notes of Collecting
trip taken by Chandler P. North and
Karl B. Koford Dec. 17, 1938 to Jan. 5, 1939

acc. 5760

Mammals 84772-84807

Itinerary

Route followed —



Chandler T. North
Carl B. Koford
Dec. 17, 1938 – Jan. 5, 1939

— marks route followed
● — marks stops.
X indicates direction of travel.

Dec. 17, 1938

Dec. 18, 1938

Dec. 19-22, 1938

Dec. 22-23, 1938

Dec. 23-24, 1938

Dec. 24-25, 1938

Dec. 25-27, 1938

Dec. 27-28, 1938

Dec. 28-30, 1938

Dec. 30-31, 1938

Dec. 31, 1938
Jan. 2, 1939

Jan. 2-4, 1939

Jan. 4-5, 1939

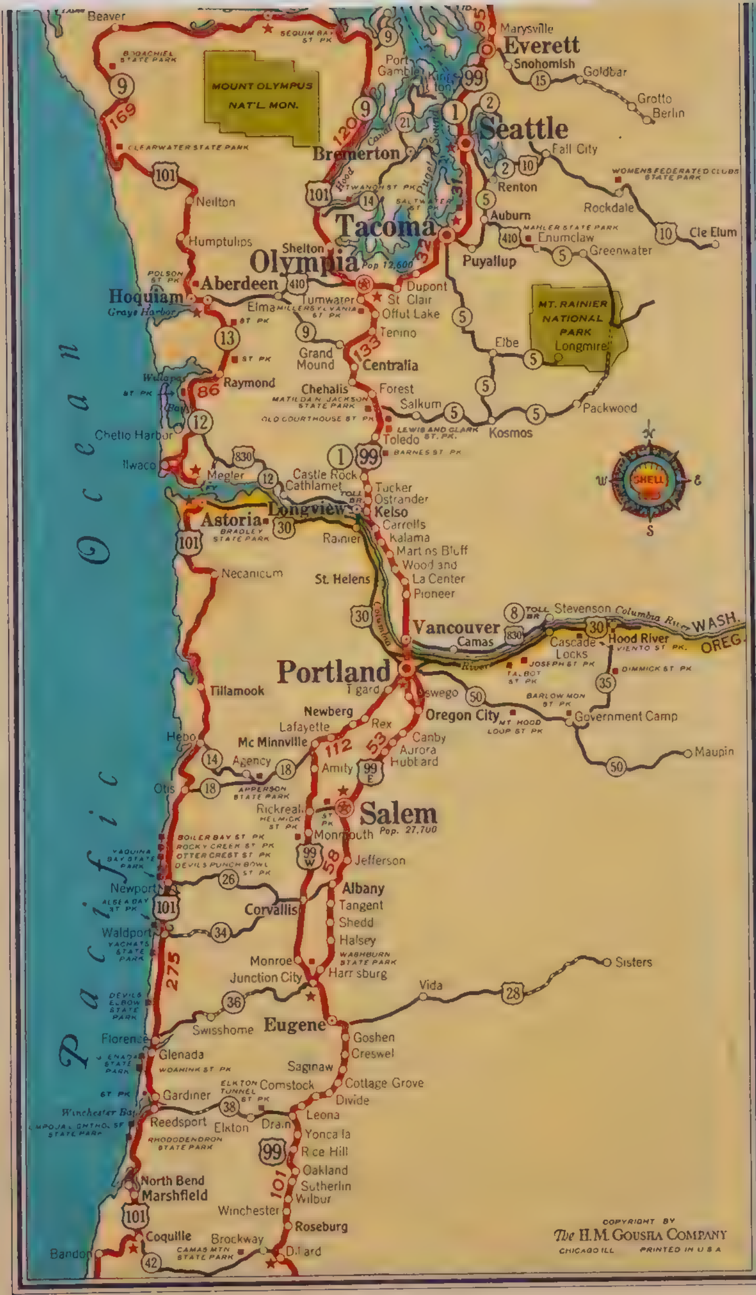
Jan. 5, 1939

To Kingman 26 Miles
PACIFIC STANDARD TIME
MOUNTAIN STANDARD TIME
To Phoenix 148 Miles
To Ensenada 69 Miles
E
F
H
10
11
12
SHELL

F THAT STATE FROM ANY SHELL STATION

Itinerary

Route followed —


MOUNT OLYMPUS NAT'L MON.
Everett
Seattle
Bremerton
Tacoma
Olympia
Aberdeen
Hoquiam
Centralia
MT. RAINIER NATIONAL PARK
Astoria
Longview
Kelso
Vancouver
Portland
Oregon City
Salem
Albany
Corvallis
Eugene
Marshfield
Pacific Ocean
WASH.
OREG.
SHELL
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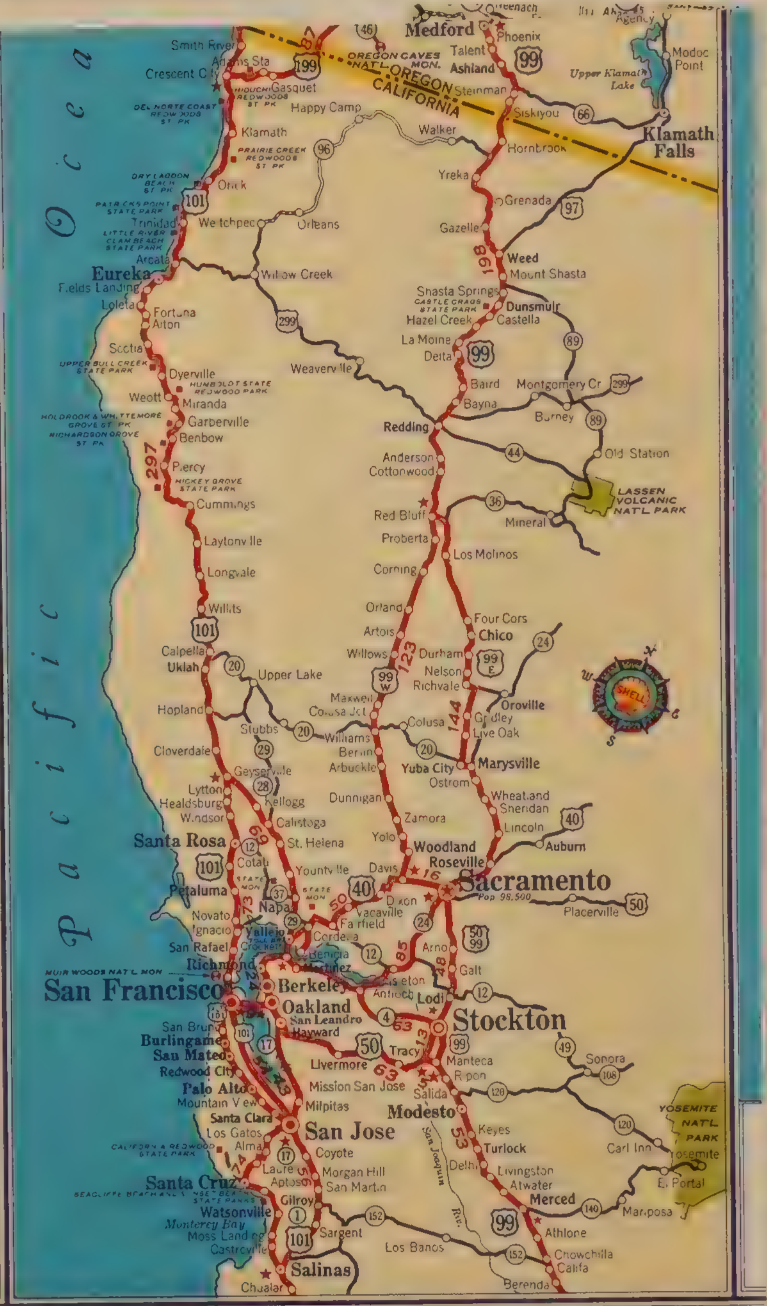
Medford
Ashland
OREGON
CALIFORNIA
Klamath Falls
Crescent City
Yreka
Eureka
Redding
LASSEN VOLCANIC NAT'L PARK
Red Bluff
Chico
Marysville
Sacramento
Santa Rosa
San Francisco
Berkeley
Oakland
Stockton
San Jose
Modesto
Merced
Santa Cruz
Salinas
YOSEMITE NAT'L PARK
Pacific Ocean
SHELL

North

(Copy) CPR

8 mi. S of Palo Verde, Imperial Co., Calif.

Dec. 19, 1938 Verdins were present, that only in one small group was seen. Audubon warblers seemed to be migrating through and not resident. Two Uta, lizards, seen sunning on rocks, temp. 82°F, both were collected and preserved in 10% formalin.

Arroyo Seco, 12 mi. S of Palo Verde, Imperial Co., Calif.

Dec. 19, 1938 - Made camp, near bottom of Arroyo Seco, at edge brush just below gravelly plain, where creosote bush is dominant plant. Set out 35 traps at foot of creosote bushes on gravelly ground. Visited traps at 9:15 P.M. and took 2 Dipodomys (merriami?) and one Peromyscus maniculatus, which I put up at once. In had one more Dipodomys (merriami?)

Dec. 20, 1938 It rained hard for about 20 min. so that water covered the ~~foot~~ bottom of our tent. We hastily packed, starting when the rain started at about 4:45 A.M. Rain stopped soon so after finishing packing we walked south from camp, along edge of brush, to where some bee hives were under a shelter covered with what I think was arrow weed (Pulchea sericea).

The bees were scarcely active.

On way down saw flock of about 7 Gambel quail, shot at them with a 410 shotgun & 7½# shot, but only knocked feathers out

(copy) cpn

Arroyo Seco, 12 mi. S of Palo Verde, Imperial Co., Calif.

Dec. 20, 1938 of one. Saw many Phainopeplas and woodpeckers, that I think were Gila woodpeckers. Shot a cactus woodpecker. Departed about noon to look for higher camping spot. Got stuck in a wash because went through too slowly. Before leaving camp found two weevils (Curculionidae) and two beetles (Tenebrionidae) which I collected for Tillotson.

Found camping place about 2 miles N of other place, still at foot of Arroyo Seco, but further from cottonwoods trees. Set out 35 traps on sandy ground that was quite damp but had not been under water (flooded). Traps were put under creosote bushes, both on sandy and gravelly ground but most were on damp sandy ground. Attempt was made to cover area thoroughly as it was somewhat isolated. The whole area was about 100 x 200 ft.

Dec. 21, 1938 - Caught one Dipodomys (merriami) and one Perognathus. Will leave traps in same places tonight & try peanut butter for bait in place of rolled oats. Shot. ~~E~~ a mockingbird this morning. Heard coyotes howling last night also numerous great horned owls and some screech owls.

North

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Arroyo Seco, 12 mi. S of Palo Verde, Imperial Co., Calif.

Dec. 21, 1938 Saw flock of Gambel quail this morning
Temp. 47°F and Koford shot one with 12 gauge shotgun.
at. 6:45 A.M. They broke up into pairs after being shot at. There was no rain this morning but a cold S wind is blowing. Mosquitos were numerous last night.

After lunch Koford and I walked down to edge of Colorado River - vegetation was as follows - first, that is nearest to camp was belt of mesquite which gave way to screwbean closer to there river where it seemed to wetter, scattered sometimes in the screwbean but usually closer to the river were cottonwood trees, after the screwbean, and forming a very dense growth close to the river ~~and~~ was arrow weed (Pulchea ~~[illegible]~~ea sericea) and at the edge of the river, some willows and many cottonwoods. We found an open space 2 or 3 hundred yards long and about 75 or 100 yds wide that had grass and was fenced. The area was flooded at the time and no attempt was made to identify the grass. We walked upstream along the edge of the bank until opposite the N side of the arroyo and then back in towards it.

North

(copy) cpa

Arroyo Seco, 12 mi. S of Palo Verde, Imperial Co., Calif.

Dec. 21, 1938 All the way to the river, we walked in mud, also all the way back. We talked to a cattle tender or caretaker of the fenced off land and he said that it took several men, on horseback, with the aid of dogs 3 weeks to round, about 150 cattle, out of the brush we had just come through. He also said that the whole river bottom flooded at every heavy rain which accounted for the extreme muddy & wet conditions we found. This agreed with our experience on Dec. 20, 1938 when a 20 or 30 min. rain put about one foot of water in a wash near our camp.

We were told, by the cattle tender, that the deer stayed in the thick brush but were forced out by (rain) water onto the gravelly plain that is cut deeply by many ravines or small washes.

The washes near our camp had many mesquite trees and some Palo Verde trees in them all of which seemed to lean "down stream".

Dec. 22, 1938 - Traps in same place as last night. Caught
49°F at one Perognathus, with broken tail, probably
6:45 A.M. one that sprung trap early in evening, nothing else was taken, although 4 traps had bait gone. Last night picked

(copy) cpu

Arroyo Seco, 12 mi. S of Palo Verde, Imperial Co., Calif.

Dec 22, 1938 Eleodes beetle off trap treadle which might account for some sprung traps. Birds seem to be quiet as compared to yesterday, due possibly to rain last night and clouds this morning that have not cleared up by 8:30 AM. Phainopeplas are only ones that are giving call notes & those not very frequently. I shot a ♀ Phainopepla this morning and put up the skin. While turning over boards around camp, which was at the site of an old bee shelter like the one seen at the ~~last~~ camp, I found & collected 4 Uta lizards. They were very torpid but could move around, 2 of them quite rapidly. They seem in good condition and probably are active during the day when the temperature is high enough. One was very pale and seemed spotted rather than stripped. The others are quite dark. Two have regenerated tails.

There are present many small gray birds about the size & appearance of ~~gnatch~~ gnatcatchers, and a few kinglets, both frequent mesquite and creosote bush mainly.

Coyotes were heard howling in the direction of the river at about 7:45 A.M. Broke camp about 3:30 p.m. with cold N

North

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Arroyo Seco, 12 mi. S of Palo Verde, Imperial Co., Calif.

Dec. 22, 1938 wind blowing. Birds were quite and sky clouded.

Made camp in strong N wind about 18 mi. N of Ogilby, Imperial Co., Calif. Ground covered with small rocks, with some soil beneath, vegetation was principly creosote bush with some cactus. Camp was at edge of wash with mesquite and palo verde the main trees in it. Set out 120 snap traps in the dark along a shallow drainage groove where there were a few creosote bushes & some very low, grey bushes. Set traps at foot of bushes. Went to bed at 7:30 pm with cold N wind blowing & sky cloudy.

Dec. 23, 1938 Sky cleared up during night but strong cold wind blowing in morning. Caught one Perognathus at foot of dead scrabby tree. Only saw one bird & that was flying over so could not identify it.

Broke camp & drove to Ogilby & then to Yuma, Arizona where stocked up with food. Agriculture inspectors did not inspect us as we were coming right back to California. Drove west along highway U.S. 80 & then branched to Calif. 98, towards Calexico, Imperial Co., Calif. Make camp about 18 mi. E of Calexico about 1:00 pm., on sandy

North

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18mi. E of Calexico, Imperial Co., Calif.
Dec. 23, 1938 ground with fine gravel in it, with
creosote bush, spaced about 30-50 ft
apart, the only vegetation. The sand is
fine enough to drift.
Set out 36 snap traps, near and under
creosote bushes and out in the open.
Set them about 20 paces apart. Caught
a house mouse (Mus musculus)
before going to bed. Nearest dwelling
is at a group of house trailers of workers
of a construction job ½ mile or a mile
away. xx
Dec. 24, 1938 - Koford caught a kit-fox in a steel
49°F at trap baited with mouse bodies.
6:45 A.M. I walked in rolling sand about ¼
mile NE of camp & found what looked like
Dipodomys tracks but they were not
numerous and appeared to wander far
so that a few rats could make a lot
of tracks.
Saw a thrasher, appeared to be (Toxostoma
lecontei) and some other birds I couldn't
identify - had long tail & relatively
short wings, tail carried high when on
ground but in air bird look like black-
bird in outline. Color was grey with a
dark streak on each side of breast. Have
identified bird just described as Sage
sparrow (Amphispiza nevadensis)

North

(copy) (c.r.a)

14 mi. E of Calexico, Imperial Co., Calif.
by one I shot.

Dec. 24, 1938. Moved camp west, on high 98, toward Calexico about 2 miles, where found ~~many~~ few Dipodomys tracks on sand. ~~I did not bait any~~ I set 36 trap but only took 4 Dipodomys and one Thomomys (gopher) so after putting them up we moved camp about 2 miles west where found many Dipodomys

Dec. 25, 1938 tracks. I did not set any traps as was too tired. Koford caught one Dipodomys before going to bed.

Dec. 26, 1938 - This camp is on ~~rather~~ rolling ground with hillocks covered with mesquite numerous - nearly all ~~the~~ of these hillocks have Neotoma (woodrat) houses on them. There is some creosote brush present also ~~small~~ many low grey bushes about 1-1½ or 2 ft. high that appear to be a sage brush and perhaps some (Atriplex?). One of these bushes has a very prickly fruit which the rat tracks would indicate that the rats are eating. Nothing else was caught by Koford last night. This morning I found 2 freshly dug kit fox holes ~~where~~ so I made a steel trap set beside one of them. One hole had bird feathers & part of a wing in it and appears to have been a cache as the feathers were not fresh. Baited trap with

North

(copy) cpn

14 mi. E of Calexico, Imperial Co., Calif.

Dec. 26, 1938 piece of jackrabbit I shot with 22 rifle this morning. Saw two thrashers (T. lecontei) and a wren I could not identify also many small grey birds that looked like gnatcatchers also few kinglets. Set 36 snap traps half of which I covered partially with sand & rest uncovered, all baited with rolled oats. Also set 6 rat traps on hillocks for woodrats and made another kit fox set with steel traps. In evening heard quite a few doves that seemed to be going to roost in the mesquite on the hillocks also saw what I think was a Say phoebe.

Dec. 27, 1938 Caught 2 Dipodomys (merriami?) & Kofoed caught a jackrabbit (in a steel trap) and a Dipo also later a thrasher (T. lecontei). in steel trap. I took 2 Neotoma & Kofoed 3, they were all except one infested with bot warbles (Cuterebra sp). I shot an immature white-crowned sparrow but it was moulting badly & feathers came out at the slightest touch so I did not put it up.

Broke camp at 3:30 p.m. & went through Calexico where mailed some post cards, home, and bought some supplies. Made camp for night about 14 miles W of Calexico, about directly N of W end of Signal Mt.

North

(copy) (cpa

Country is rolling but fairly flat. Sand is white or nearly white. Burro bush that I think are a type of sage brush are the main vegetation with some smoke trees (Parosela) and one mesquite tree in a wash near camp.
Set 23 snaptraps and partially covered them with sand.

Dec. 28, 1938 Caught 2 Dipodomys (merriami) and Lofford caught a Dipodomys deserti and a kit fox. There are many large flocks of birds present. Set 6 gopher traps in morning and picked them up just before leaving. Caught one gopher. Collected several Tenebrionids for Tilloton.

Broke camp and drove westward towards Mt. Springs on this same road which goes west from Mt. Signal, Imperial Co., Calif (town) across desert few miles N of Mexican border. Tried to find type locality of Peromyscus crinitus stephensi described by Grinnell as "3 miles east of Mt. Spring, Imperial Co., Calif." but that would put you in the middle of the Mts. & not at "the lowest water on wagon road near eastern base of Coast range" which is true location as given by describer of species, as it would not

(copy) upa

Dec. 28, 1938 have been possible to take wagon over country 3 miles east of Mt. Springs with any vestige of ease, so that it is my opinion that the wagon road ran through the canyon that Mt. Springs is in and that the lowest water, near the ~~at~~ eastern base of the coast range, is near near the east end of the canyon and in the wash, dry when we saw it, that is at the bottom of the canyon. This would place the type locality of *Peromyscus crinitus* ~~stephensi~~ *stephensi* NE of Mt. Springs and also I think that it would be more than 3 miles from Mt. Springs. This is to be investigated when we return to Berkeley.

In our search for possible old wagon roads we finally wound up somewhere near the Petrified forest south and a little west of Coyote Well, Imperial Co., Calif., and we think in Mexico as we passed a sign that warned people entering the United States to report to customs officials. We went a mile or more passed this sign which was on a road, supposedly to the Petrified forest, along the east base of the coast ranges. We stopped

North

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6. mi S and 3½ mi E of Mt. Springs, in Mexico.

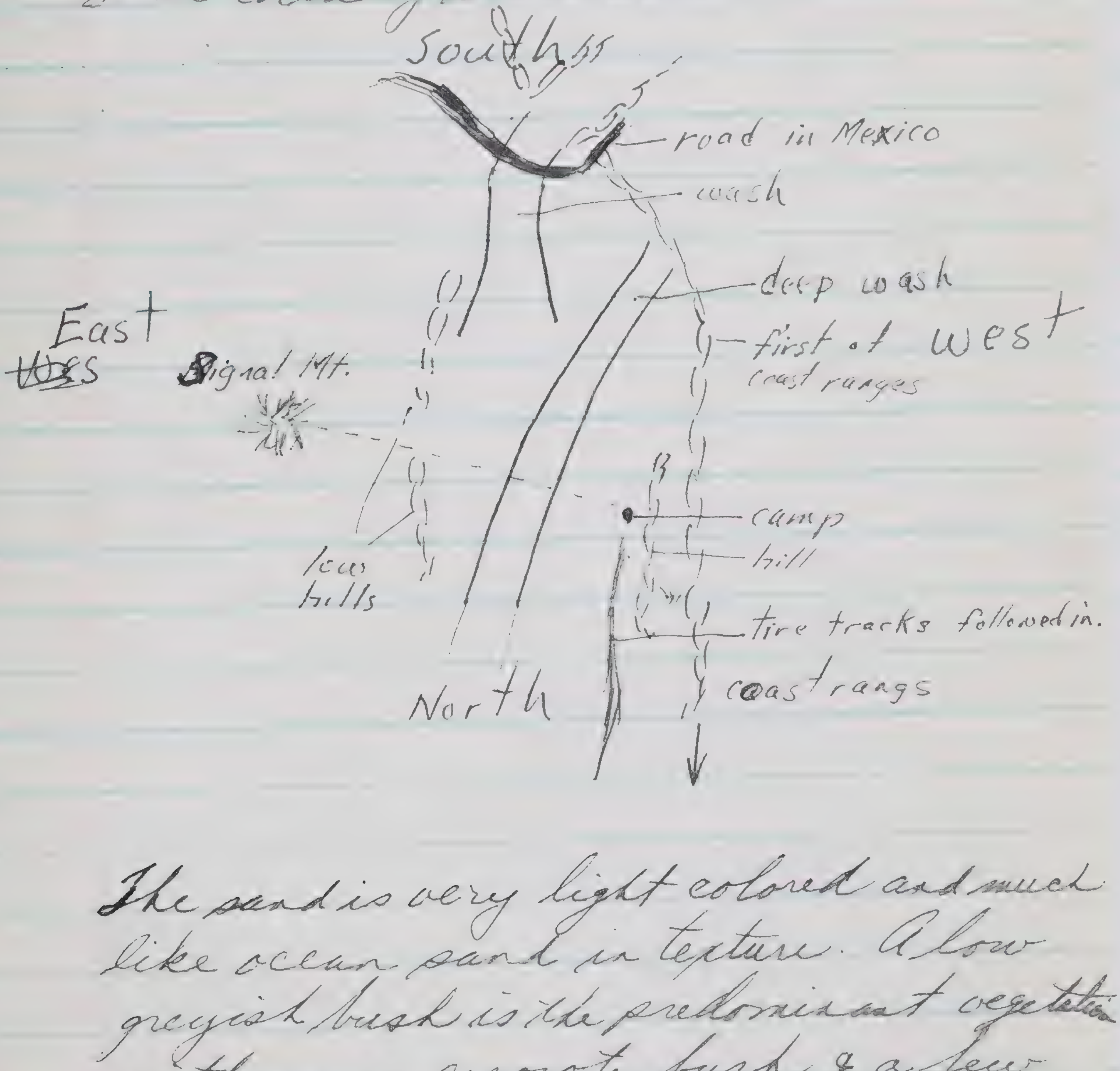
Dec. 28, 1958 at a deep wide wash, about 60 ft deep or a little more and several hundred feet across. This wash was just west of a small range of hills and east of the coast ranges. We followed tire tracks in the sand along the east base of the coast ranges until the sand became too soft. This put us at the base of a small hill at the foot of the coast ranges where we could see, directly E or a little NE of our camp, Mt. Signal, (in Mexico), through the low place in a "saddle" made by the small hills east of the wash just described, which was several hundred yds. east of our camp. S SW of us, with the aid of 8 x 30 binoculars, we could see a road which we think is probably the road from Mexicali, Mexico to Tecate, Mexico or a branch of that road to Jacumba, Mexico. We walk about 2 or 3 miles towards it but there ~~is~~ was no connection between it and the tire tracks we were following. We made no other attempt to get to this road which would probable have been possible by crossing the wash east of our camp at a place NE of camp. The true location of this camp will be

North

(copy) cpn

6 mi S, 3½ mi E of Mt. Springs, Imperial Co., Calif., in Mexico.

Dec. 28, 1938 determined as closely as possibly when we return to Berkeley. Looking south from camp the below diagram gives some idea of our location


South
road in Mexico
wash
deep wash
East
~~Wes~~
Signal Mt.
first of West coast ranges
camp
hill
low hills
tire tracks followed in.
coast rangs
North

The sand is very light colored and much like ocean sand in texture. A low greyish bush is the predominant vegetation with some creosote bush & a few varied cactus. There is also a type of grass that seems to grow in small bunches but doesnot look like or grow like a typical bunch grass.

The are quite a few fresh gopher mounds scattered on the lower part of the slope that comes down from the hill.

North

(copy) cpn

6 mi. S and 3½ mi. E of Mt. Springs, Imperial Co., Calif., in Mexico.

Dec. 28, 1938 Some gopher mounds were also seen in the bottom of the big wash east of camp.

Dec. 29, 1938. I did not set any traps last night but Koford set mine in addition to his, ~~I set~~ and took 4 *Dipodomys*, 3 *Perognathus*, and 2 *Peromyscus* that appear to be *P. crinitus*. I set 5 gopher sets this morning and took 3 gophers during the morning, which are quite small compared to those taken east of Calexico, but are about the same color. I put up gopher taken by me yesterday morning 14 mi. West of Calexico, 3 *Perognathus*, and 2 *Dipos*, also a thrasher taken in Kofords stell trap *east* of Calexico on Dec. 27, 1938. Set out 31 snap traps - lost 5 somewhere -, on top of hill west of camp, on rocky ground.

Dec. 30, 1938 Caught 3 *Dipos* and 2 ~~Perognathus~~ *Peromyscus* but no more gophers. Koford made two double gopher sets but did not catch anything, although the traps of one set were torn apart and one trap I found about 15 ft. away but other could not be found. Last night was fairly warm inspite of a gentle N wind blowing. Koford took 5 *Peromyscus* (*crinitus* ?) on west side of hill I trapped on, but down at the bottom of a small canyon.

North

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4 mi. N of Warrens Well, San Bernardino Co., Calif.

Dec. 30, 1938 Have not seen any birds, but heard a thrasher and some other birds that give a call note like the tseep of a white-crowned sparrow.

Moved camp - went N. through Imperial and Brawley and stopped just off highway U.S. 99 N of Brawley a few miles.

Dec. 31, 1938 Visited Salton Sea beach and saw, Willets, Godwits and some unidentified gulls and a sand piper.

Made camp about 4 miles N of Warrens Well, San Bernardino Co., Calif. among large rocks with many junipers and tree yuccas present. There were many low shrubs, I could not identify, that formed rather a dense ground cover

Jan. 1, 1939 cover. Caught. Neotoma, Dipodomys, Peromyscus and 2 gophers here. There were quite a few Utas, lizards, active during the day, I could not catch them by hand, but Koford shot one "gently" with a .22 revolver. They all had a bright reddish orange spot just over the eye which showed up very well as the lizards moved around.

The soil here, was dark and composed of decomposed granite and vegetable matter. The surface soil was light but beneath it was quite dark.

North 17

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Jan. 1, 1939 There were many wood rat nests present with one in nearly every large rock crevice. Saw one Sage sparrow but no other birds.

Jan. 2, 1939 Moved camp — went by Old Woman Well and on into Victorville, which was closed as far as stores were concerned. We are out of #22 and #20 wire & only have some #18 and #24. Went ~~SE~~ SW on ~~66~~ highway #66 looking for pinon pines Dr. Hall said were supposed to be about 10 mi. S of Victorville. Went as far as Cajon Pass but did not find any so took road to Hesperia which runs S ~~west~~ ~~from~~ east from about 10 miles SW of Victorville on highway #66. Went through Hesperia which is 9 mi. S of Victorville but did not find any pinon pines so went further on down road to Lake Arrowhead which runs SSE ~~of~~ from Hesperia, and camped at edge of Mohave river about 8 mi. SSE of Hesperia, San Bernardino Co. This distance is as the crow flies. We were just barely N of the San Bernardino National Forest.

Jan. 3, 1939
26°F at
7:00 AM
Took 10 Dipodomys (mohavensis?) and 2 Peromyscus in 50 traps (with Koford & North). Traps were set among Junipers which were rather thickly scattered in a

North

(copy) cpn

Jan. 3, 1939 Con-unidentified bush. There are no yuccas on this (S) side of river but across the river on S facing hillside there are many *Yucca whipplii* growing. The ground is very sandy with some very coarse sand and small gravell. Soil is the darkest we have trapped on and the mammals are also quite dark, the *Dipodomys and gophers* especially.

Jan. 4, 1939
19° F
6:45 A.M.
Last night *we* took 9 *Dipodomys* and 2 *Onychomys* and 4 *Peromyscus maniculatus*. Shot a pipit on the sand at edge of river yesterday, No. 255 Cpn. catalogue. There are few birds here, saw shrike yesterday and one flock Juncos today also heard Great Horned owls at night. Scared a few quail up from foot of trees in morning. Saw flock of western bluebirds this morning. Moved camp up road to Lake Arrowhead to place about 4 miles N of Lake Arrowhead and camped at a public camp ground called "Toll Road Public Camp Ground". This was near summit of mts. Koford set 25 traps but I did not as I wanted to hunt some birds in the morning.
Camp was among tall ponderosa pines with *Ceanothus* about 200 ft from camp. Saw Steller jays, a chickadee, a slender-billed nuthatch and a

(copy) epn

Jan. 4, 1939 Hairy woodpecker, - distinguished from downy woodpecker by its call. A large flock of juncos was present in the camp area also.

Jan. 5, 1939 ~~Buke com~~ Koford caught a Dipodomys (mohavensis?), 1 Perognathus, 1 Peromyscus (boylii or truei?), 2 Neotoma and a gopher. He set his traps among rocks and at edge of brush. Before leaving, while I was packing, Koford shot a ♀ white-headed woodpecker. This morning and yesterday I heard California woodpeckers (Melanerpes formicivorus bairdi) calling but did not see any. A few robins were present in the trees around the camp also. We broke camp as soon a possible due to extremely threatening weather and drove west towards Lake Arrowhead. The road had been scraped clear of snow, but it was still very icey and treacherous in places. We got into fog at Lake Arrowhead and did not get out until nearly at the bottom of the grade down to San Bernardino. We saw numerous coots (mud hens) on Lake Arrowhead, as we drove by.

Due to heavy rains which we

North

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(Jan. 5, 1939 copy) cpn

(Jan 20, 1939 origuial). cpn

Jan. 5, 1939 had to drive, in, from San Bernardino to Los Angeles, the road was flooded in many places at one time reaching the running boards of the car.

Jan. 20, 1939 I have looked up data on the type locality of Peromyscus crinitus stephensi that we looked for, Dec. 28/38, without finding. The type specimen was taken by Frank Stephens May 8, 1894 - quote, "among granite bowlders at the first water in the canyon through which the wagon road crosses the Coast Range Mountains by way of Mountain Springs, in San Diego County, California, at the east base of the mountains," unquote. The foregoing description is taken from "Smithsonian Institution, United States National Museum," bulletin 56 of the year 1907 and written by Edgar Alexander Mearns, M.D. Major and Surgeon, U.S. Army.

In giving his itenerary and ~~descrip~~ description of flora, he states, p. 131, that from May 7 to 9, 1894 his party was camped at station No. 84, which was quote "Eastern base of the Coast Range Mountains, San Diego County, California. This station was

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Jan. 29, 1939. at the lowest water in the canyon through which the San Diego wagon road passes, about 8 kilometers (5 miles) north of Monument No. 230, 129 kilometers (81 miles) west of the Colorado River, and 98 kilometers (60 miles) east of the Pacific Ocean. Altitude, 560 meters (1,837 feet)," unquote.

Station No. 83 was at Coyote Well which was, I think, the ~~present~~ sight of the present Coyote Wells, Imperial Co., Calif. since he gives that location as:- "13 kilometers (8 miles) north of Monument No. 229, 127 kilometers (79 miles) west of the Colorado River and 100 kilometers (66 miles) east of the Pacific Ocean. Altitude 100 meters (328 feet)". By checking on maps that show monuments I decided that this agreed with the present Coyote Wells.

From Station No. 84, Mearns says that they moved "up the slope to Mt. Spring"; from this I judged the two camps to be in the same canyon.

Checking on maps showing monuments showed Mearns' Mt. Spring to be the site of the present Mt. Springs, Imperial Co., Calif.

By drawing triangles and using

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Jan. 29,1939 distances from monuments, given by Mearns, ~~that~~ I have calculated that the type locality of *Peromyscus crinitus* ~~ssp~~ *stephensi* ~~should~~ It is 3.6 miles NE of Mt. Springs, Imperial Co., Calif., or about 4.2 miles SW of Coyote Wells, Imperial Co., California and at an altitude of 1,837 ft. These distances "as the crow flys).

At the time ~~of year~~ I was looking for the type locality, there was no water in the wash however a search might have found some and since I was driving a car, I could not look for water. I did not have this description with me either.

I believe this type locality to be near the mouth of the canyon and when looking for this place, I suggest that distances should be measured "as the crow flys," and not along the road, by automobile ~~speedo~~ speedometer. I checked distance between the present site of Coyote Wells and Mt. Springs, ~~and~~ on a "Shell Oil Co." road map and found it to be roughly 8 miles this agrees with the distances as computed from Mearns' data. I also suggest

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Jan. 29, 1939. that persons looking for this type locality, if possible, take with them an altimeter as the land slopes gently at first and then takes a sharper grade, but the bottom of the canyon which Mearns was in at the time has a gradual slope.

If further data is wanted concerning the above material I refere you to "Mammals of the Mexican Boundary" bulletin #56 of Smithsonian Institute, United States National Museum" by ~~the~~ Edgar Alexander Mearns.

North

(copy) CPA

Uta stansburiana

Dec. 19, 1938- Two were seen sunning on rocks. Were very active. Temperature was 82°F. They were caught and preserved in 10% formalin. This was at our camp in the Palo Verde Mts. about 8 mi. S. of Palo Verde, Imperial Co., Calif.

Dec. 22, 1938- Arroyo Seco, 12 mi S. of Palo Verde Imperial Co., Calif. — Four were found, and collected, under boards. They were on gravelly ground above flood point. Creosote bush was main vegetation, with mesquite and Palo Verde near by in the washes. There were a few larger rocks around but no boulders. Two of them had regenerated tails. All were very torpid but could run quite rapidly if given the opportunity and stimulus. They were preserved in 10% formalin.

Jan. 1, 1939- 4 mi. N of Warrens Well, San Bernardino Co., Calif. — There are quite a few Utas present here but I have not been able to catch any due to the great amount of small shrubs present. All the Utas here seem to have a bright, reddish-orange spot over the eye. This shows up very well on the live lizards. Koford shot a Uta "gently" with a .22 revolver to day- #No. 262 CPA catalogue.

North

(copy) cpn

Dipodomys (merriami?)

Dec. 30, 1938 — that seemed too large for merriami I think they were deserti because many of our traps would be drag several ft. when set. All of the Dipo tracks seemed to concentrate on the lee side of sand dunes, on the lee side of small grey bushes that had a very prickly fruit. This concentrate of tracks on the lee side I think may have been due to wind blowing the fruits towards the lee side where I could usually find small pills of the burrs. These fruits had much the same appearance of star thistle fruits (Centaurea) except that the spines were not as long and much broader at the base. There were many small holes an inch or two deep, some of them with Dipo tracks around them. I dug at some places where the soil was disturbed, as if a beetle had dug in, and found a small brown beetle at the bottom. I collected several of these and have given them to Mr. D. F. Tillotson. Other places of soil disturbance proved to be places where small plants were breaking through the surface

North

(copy) epn

Dipodomys (*merriami?*)

Dec. 30, 1938 – so that, the *Dipodomys* may have been digging either for the recently ~~germinate~~ sprouted seed or for the beetles. In several of the *Dipos* I found fruits of the small grey bush & so am sure that this is used for food. I also have noted that no tracks were found or *Dipodomys* caught where this bush was not present.

At our camp 16 mi. E of Calexico, there were many rather large holes dug in mounds at the foot of creosote bush and a low green shrub that had no leaves and had somewhat the appearance of Scotch broom. I dug into one of these and found many burrs, of the low grey bush, in the burrow passages, they may have been blown in by the wind but I think were carried in by *Dipodomys*.

Here, at our camp SSE of Mt. Springs, Imperial Co., the *Dipodomys* are the palest we have caught yet, the sand is also the lightest color we have ~~stopped~~ trapped on to date. Here I have taken *Dipodomys* on sandy and rocky ground but nearly always,

North

(copy) epn

Dipodomys (merriami?)

Dec. 30, 1938 - when taken on rocky ground, they have been at the edge or near a ~~small~~ sandy spot, large or small.

Jan. 1, 1939 - 4 mi N Warrens Well.

Here N of Warrens Well, San Bernardino Co., I took 2 *Dipodomys* among low shrubs, with many junipers and tree yuccas present. Soil is rather coarse and composed of decomposed granite and mold from leaves of the rather dense vegetation, - which was never more than 10 or 15 ft. between bushes.

North

(copy) cpn

Perognathus

Arroyo Seco, Imperial Co., Calif. Dec. 21, 1938

One taken on sandy ground just above flooding level, with creosote bush the only vegetation.

Dec. 22, 1938 - One taken on sandy ground in same area as last night.

Dec. 23, 1938 - One taken on ground covered with small rocks and some (dark) soil beneath. This ground appeared to be volcanic.

Dec. 29, 1938 - 3 taken on rocky slope and on rocky flat at top of slope. Only vegetation is a low grey bush - possibly (Artemisia) and another low bush with many spines, some creosote bush was present also. All vegetation was well scattered.

Jan. 5, 1939 - Koford took one at our camp 4 mi. N of Lake Arrowhead, San Bernardino Co., Calif.

North (original) cpa 1

Neotoma

Arroyo Seco, 12 mi. S of Palo Verde, Imperial Co., Calif.

Dec. 22, 1938 - Koford took a young *Neotoma* under a mesquite tree near a wash. I have not seen any nests probably because I don't know where to look. Koford saw a small animal that he said was either a wood-rat or a ground squirrel.

14 mi. E of Calexico, Imperial Co., California.

Dec. 26, 1938 — There are many woodrat droppings, outside of what appear to be old nest, under mesquite on hillocks that rise up to 10 ft, in some cases more. I have set 6 rat traps where I found the freshest droppings, or freshly cut mesquite leaves. I have not seen any tracks that I thought were *Neotoma* out on the sand away from the hillocks.

Dec. 27, 1938 - I took two rats & lost a trap (carried away) and Koford caught 3 rats. All of Kofords are infested with one or two bot warbles (*Cuterebra*) either under the neck or on the chest. ~~Mine~~ One of mine had a very small warble that had not broken through to the outside surface, and the other was clean. The rats did not

North

2

(original) epn

Neotoma

14 mi. E of Calexico, Imperial Co., California. Dec. 27, 1938 — seem to be ~~in~~ poor condition physically due to the bot warbles.

Jan. 1, 1939 — 4 mi. N of Warrens Well, San Bernardino Co., Calif. —

Here there are many large granite rocks and piles of granite, which have cavities and crevices in them. Nearly all of such places are occupied by woodrats as evidenced ~~at~~ by droppings and trapping. The rats here seem to be eating juniper berries to a great extent. The ~~pe~~ Peromyscus taken seem to be somewhat connected with Neotomas as they are caught nearly always, close to Neotoma nests.

Jan 3, 1939 — 8 mi. SSE of Hesperia, San Bernardino Co., Calif.

Here there are piles of sticks & freshly cut juniper at the foot of many of the juniper trees that, I are woodrat nests, but we have only been able to catch one Neotoma.